

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
19 May 2005 (19.05.2005)

PCT

(10) International Publication Number
WO 2005/045412 A1

(51) International Patent Classification⁷: **G01N 27/327**, C12Q 1/00

(21) International Application Number: PCT/GB2004/004574

(22) International Filing Date: 29 October 2004 (29.10.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/516,252 31 October 2003 (31.10.2003) US
60/558,424 31 March 2004 (31.03.2004) US
60/558,728 31 March 2004 (31.03.2004) US

(71) Applicant (*for all designated States except US*): **LIFESCAN SCOTLAND LIMITED [GB/GB]**; Beechwood Park North, Inverness IV2 3ED (GB).

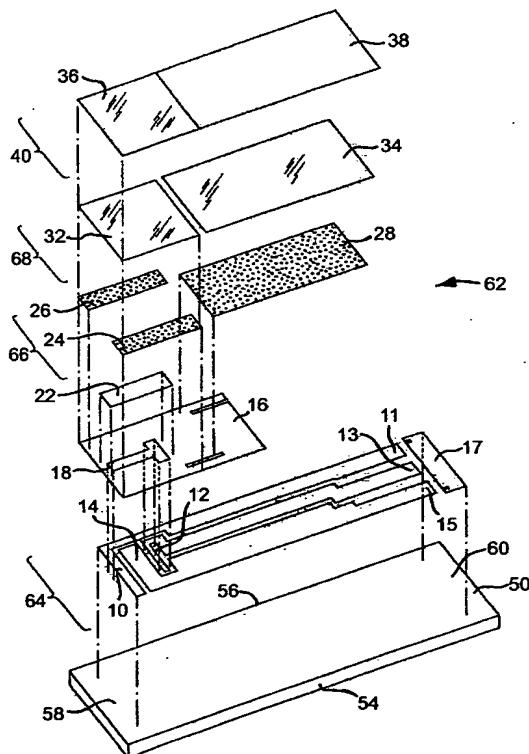
(72) Inventors; and
(75) Inventors/Applicants (*for US only*): **DAVIES, Oliver, William, Hardwicke [GB/GB]**; An Cluaran, Croy, Inverness IV2 5PG (GB). **MARSHALL, Robert [GB/GB]**; 72 Braes of Conan, Conon Bridge, Ross-Shire IV7 8AX (GB). **BASKEYFIELD, Damian, Edward, Haydon [GB/GB]**; Craigends Cottage, Auldearn, Mairnshire IV12 5TH (GB). **WHYTE, Lynsey [GB/GB]**; 101 Ardness Place, Lochardil, Inverness IV2 4PE (GB). **LEIPER, Elaine [GB/GB]**; Tarnash, Dores Road, Inverness IV2 4QU (GB).

(74) Agents: **MERCER, Christopher, Paul et al.**; Carpmaels & Ransford, 43-45 Bloomsbury Square, London WC1A 2RA (GB).

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,

[Continued on next page]

(54) Title: METHOD OF REDUCING THE EFFECT OF DIRECT INTERFERENCE CURRENT IN AN ELECTROCHEMICAL TEST STRIP



(57) Abstract: This invention describes a method of reducing the effect of interfering compounds in a bodily fluid when measuring an analyte using an electrochemical sensor (62). In particular, the present method is applicable to electrochemical sensors where (62) the sensor includes a substrate (50), first and second working electrodes (10,12), and a reference electrode (14) and either the first and second or only the second working electrode include regions which are bare of reagent (22). In this invention, an algorithm is described with mathematically corrects for the interference effect using the test strip embodiments of the present invention.

WO 2005/045412 A1



KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) **Designated States (unless otherwise indicated, for every kind of regional protection available):** ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,

FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.